



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,917	05/28/2002	Gerhard Heise	SI01-011	2793
7590 11/13/2003			EXAMINER	
Walter M Douglas Corning Incorporates SP-TI-03 Corning, NY 14831			PAK, SUNG H	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 11/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/031,917	HEISE ET AL.	
	Examiner	Art Unit	
	Sung H. Pak	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>0402</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

All references submitted in the information disclosure statement have been considered by the examiner. Please refer to PTO-1449 enclosed herewith.

Claim Objections

Claims 2, 4, 6, 10 are objected to because of the following informalities: the claims recite "the guide", "the ferrule" and "the second waveguide." However, these recitations lack proper antecedent basis. The examiner believes that claim 2 was inadvertently recited as an independent claim, where it should have been dependent on claim 1. Appropriate correction is required.

Claims 5, 7 and 8 are objected to because of the following informalities: the claims recite "the second holding block" but this recitation lacks proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Albrecht et al (US 6,470,119 B1).

Albrecht et al reference discloses an optical device with all the limitations set forth in the claims, including: a first waveguide and a second waveguide (Fig. 1); variable-length element ("7" Fig. 1); which holds the first waveguide (Fig. 1), and the variable-length element being fixed via a first holding element (Fig. 1) to the structure containing the second waveguide; a guide element which permits the variable-length element to lengthen only in a spatial direction oriented substantially parallel to the longitudinal axis of the element (Fig. 3-4); wherein the guide has a second holding block as an abutment on which the variable-length element is guided parallel to its extension direction (Fig. 3-4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al (US 6,470,119 B1).

Albrecht et al reference discloses an optical device with all the limitations set forth in the claims as discussed above, except it does not explicitly teach the use of a ferrule and a sleeve. However, the use of a ferrule and a sleeve in optical fiber holder device is well known and common in the art. Ferrules and sleeves are advantageously used to securely displace optical fibers in fiber holder substrates. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Albrecht et al device to have a ferrule and a sleeve disposed on either the second holding block or the variable-length element to securely hold optical fibers.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al (US 6,470,119 B1) in view of Harman (US 5,727,099).

Albrecht et al reference discloses an optical device with all the limitations set forth in the claims as discussed above, except it does not teach the use of a spring and a setting screw for aligning optical waveguides.

Harman reference, on the other hand, explicitly teaches the use of a spring and a setting screw for aligning optical fibers. Such elements are advantageous over the prior art because they interact with each other to allow for precise control over the degree of optical alignment. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Albrecht et al device to have a spring and a setting screw.

Allowable Subject Matter

Claims 3 and 5 objected to as being dependent upon a rejected base claim and containing a recitation with improper antecedent basis, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and rewritten to overcome the improper antecedent basis objections.

The following is a statement of reasons for the indication of allowable subject matter: As discussed above, an optical coupling device having variable-length element for coupling two optical waveguides is known in the art.

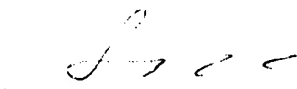
However, none of the prior art fairly teaches or suggest, such an optical coupling device further comprising a ferrule connect to, either the variable length element or the second holding block, such that the ferrule is disposed in a hole and moves in the direction of the axis of the variable length element during which the variation in length takes place, as claimed in the instant application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (703) 308-4880. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Sung H. Pak
Examiner
Art Unit 2874

sp

